



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,250	02/27/2002	Geoffrey Stiff	52493.000251	2570

21967 7590 01/15/2010  
HUNTON & WILLIAMS LLP  
INTELLECTUAL PROPERTY DEPARTMENT  
1900 K STREET, N.W.  
SUITE 1200  
WASHINGTON, DC 20006-1109

EXAMINER
----------

SWARTZ, JAMIE H

ART UNIT	PAPER NUMBER
----------	--------------

3684

MAIL DATE	DELIVERY MODE
-----------	---------------

01/15/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/083,250	<b>Applicant(s)</b> STIFF ET AL.	
	<b>Examiner</b> JAMIE H. SWARTZ	<b>Art Unit</b> 3684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 30-36 and 45-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-36, 45-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 9, 2009 has been entered.

2. Claims 30-36 and 45-59 are pending. Claims 30, 55, 58, and 59 have been amended. No claims have been cancelled, no claims have been added.

### ***Response to Arguments***

3. Applicant's arguments filed December 9, 2009 have been fully considered but they are not persuasive.

4. The applicant argues the 112 2<sup>nd</sup> rejection on pages 8-9 of the applicant response. The applicant is disagreeing with the examiners interpretation of claim 30. The applicant has pointed to paragraphs 94-97 of the specification for clarity purposes. The examiner respectfully disagrees with the assertion of clarity. Reading through the cited portions of the specification the example in paragraph 95 does not include the specific details regarding the periodic retirement income payment. Paragraph 96 does

Art Unit: 3684

include details regarding the periodic retirement income payment but merely states what happens when the periodic retirement income payment is greater than the guaranteed minimum periodic retirement income payment amount. The cited portions fail to state anything about the value being less. Thus it is unclear why the applicant pointed to those specific portions of the specification.

5. The applicant argues starting on page 11 the Dellinger does not teach an equity module. The examiner respectfully disagrees. Because applicants can be their own lexicographers the prior art does not need to teach the specific phrase "equity module." The prior art merely needs to teach everything that the applicant is doing. As long as the prior art teaches the functionality of the invention the prior art is not required to teach the specific phrase "equity module." Dellinger teaches receiving an income generating payment and outputting a period retirement income payment. The applicant argues that the reference is not fairly interpreted. The examiner respectfully disagrees. Dellinger teaches an annuity based retirement program. Specifically an annuity that generates retirement income. Further an annuity is well known in the art to contain stocks, it is also specifically mentioned in the background of the prior art. Because stocks represent an ownership in a company, stocks are considered a type of equity. Thus using an example of an annuity made up of stocks which generates a retirement income as taught by Dellinger, Dellinger teaches an equity module.

Art Unit: 3684

6. Applicant's arguments with respect to claims 30-36 and 45-59 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 30-36 and 45-58, 59 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 30, 55 and 58 were amended to include the details of an equity module determines the periodic retirement payment amount or determines whether it is greater than, equal to, or less than a guaranteed payment. However, there is no support in the original disclosure for either determination specifically by the equity module. Nor is there any support for the equity module doing anything more than receiving a payment and outputting a payment. Thus this is new matter.

9. Claims 31-36, 45-54, and 56-57 are also rejected as being dependent on rejected claims.

Art Unit: 3684

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 30-36 and 45-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Regarding claims 30, 55 and 58, the phrase "an equity module... wherein the periodic retirement income payment amount is determined, by the equity module, to be greater than, equal to , or less than a guaranteed minimum periodic retirement income payment amount" renders the claim indefinite because it is unclear what the applicant is claiming. Is the applicant claiming an equity module that determines the periodic retirement payment amount or determines whether it is greater than, equal to, or less than a guaranteed payment?

13. Regarding claims 30, 55, 58, and 59, the phrase "the adjustment module storing a balance in an adjustment account if the periodic retirement income payment amount is less than the guaranteed minimum period retirement income payment" renders the claim indefinite. It is unclear to the examiner how a balance would be stored in the adjustment account. If the periodic retirement income payment is less than the guaranteed minimum payment wouldn't the "balance" be a negative value? Thus there would be no balance to store into the adjustment account. For example if a minimum periodic retirement income payment amount is \$100, but the periodic retirement income

Art Unit: 3684

payment amount is \$95, how is the value a positive \$5 left as the balance? Are the guaranteed minimum periodic retirement income payment amount an amount that is being put into a module, and then the periodic retirement income payment amount the value that is being paid out to the user? If the guaranteed periodic retirement income payment amount is the amount paid out to the user it would not make sense for there to be any funds left over if that value is greater then the periodic retirement income payment amount. Because the minimum payment amount is still a minimum payment amount and in order for it to be the minimum payment amount the user must be paid the minimum.

14. Claims 31-36, 45-54, and 56-57 are also rejected as being dependent on rejected claims.

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 30-36 and 45-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dellinger et al. (US 7089201 B1) in view of Arena et al (US 20020184129 A1).

Art Unit: 3684

17. Regarding claim 30, Dellinger teaches a system for providing a user with a plurality of guaranteed minimum retirement income payments (see at least abstract, col. 4, lines 30-46, Fig 5). Dellinger teaches an equity module to receive an income generating payment and to output a periodic retirement income payment amount wherein the periodic retirement income payment amount is greater than, equal to, or less than a guaranteed minimum periodic retirement income payment amount if the income generating payments received are received according to a predetermined payment schedule (see at least col. 4, line 30-46, Fig. 5, col. 8, lines 35-50, col. 8, line 66 – col. 9, line 5). Dellinger teaches an adjustment module for comparing the periodic retirement income payment amount and the guaranteed minimum periodic retirement income payment amount, and for outputting to the user at least the guaranteed minimum periodic retirement income payment amount, with the adjustment module storing a balance in an adjustment account if the periodic retirement income payment amount is less than the guaranteed minimum periodic retirement income payment amount (see at least col. 8, lines 35-50, col. 8, line 66 – col. 9, line 5). Dellinger does not specifically teach wherein the equity module determines that that payment amount. However, Arena teaches wherein a periodic retirement income payment amount is determined, by the equity module, to be greater than, equal to, or less than a guaranteed minimum periodic retirement income payment amount, such determination performed based on whether the income generating payments received are received according to a payment schedule (see at least ¶ 47). This known technique is applicable to the system of Dellinger as they both share characteristics and capabilities, namely



Art Unit: 3684

they are both directed toward benefit payments based on an initial investment. One of ordinary skill in the art would have recognized that applying the known technique of Arena would have yielded a predictable result and resulted in an improved system. It would have been recognized that applying the technique of Arena to the teachings of Dellinger would have yielded predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such benefit payment determinations into similar systems. Further, determining the payment value by the equity module would have been recognized by those of ordinary skill in the art as resulting in an improved system that would have allowed a guaranteed minimum payment as determined by the module.

18. Regarding claim 31, Dellinger teaches wherein the equity module comprises at least one of a variable annuity module, a fixed annuity module, a mutual funds module, a variable life module, a single premium immediate annuity (SPIA) module, and an immediate variable annuity module (see at least col. 4, line 30 – col. 6, line 12).

19. Regarding claim 32, Dellinger teaches wherein the periodic retirement income payment may be calculated at one of the following annually, biennially, semi-annually, quarterly, monthly, bi-monthly, semi-monthly, weekly, and bi-weekly (see at least col. 7, lines 20-35, col. 12, line 60 – col. 13, line 5).

Art Unit: 3684

20. Regarding claim 33, Dellinger teaches wherein the guaranteed minimum periodic retirement income payment amount may be calculated at one of the following annually, biennially, semi-annually, quarterly, monthly, bi-monthly, semi-monthly, weekly, and bi-weekly (see at least col. 12, line 60 – col. 13, line 5).

21. Regarding claim 34, Dellinger teaches wherein the adjustment account balance is recovered by the performance of a unitized investment trust or an index (see at least col. 10, lines 3-15, col. 13, line 50 – col. 14, line 2).

22. Regarding claim 35, Dellinger teaches wherein the guaranteed minimum periodic retirement income payment amount is predetermined by the user (see at least col. 10, line 40-48, abstract).

23. Regarding claim 36, Dellinger teaches wherein the guaranteed minimum periodic retirement income payment amount is predetermined by the total premium payments made by the user during an accumulation period (see at least col. 18, lines 27-36).

24. Regarding claim 45, Dellinger teaches wherein the output of the adjustment module to the user is based on the balance in the adjustment account (see at least col. 5, lines 16-36, col. 11, lines 49-57).

Art Unit: 3684

25. Regarding claim 46, Dellinger teaches wherein the output of the adjustment module to the user is equal to the periodic retirement income payment amount, if the adjustment account balance is zero and the periodic retirement income payment amount is greater than the guaranteed minimum periodic retirement income payment amount (see at least col. 15, line 64 – col. 16, line 23, col. 8, lines 49-59, col. 11, lines 16-35).

26. Regarding claim 47, Dellinger teaches wherein the income generating payment comprises a plurality of predetermined scheduled premium payments (see at least col. 4, line 30 – col. 6, line 12, col. 13, lines 50 – col. 14, line 2).

27. Regarding claim 48, Dellinger teaches wherein the income generating payment comprises a plurality of predetermined premium payments (see at least col. 4, line 30 – col. 61, line 12, col. 18, lines 13-60).

28. Regarding claim 49, Dellinger teaches wherein the income generating payment comprises a single premium payment (see at least col. 10, line 56 – col. 11, line 17).

29. Regarding claim 50, Dellinger teaches wherein the income generating payment comprises a plurality of premium payments (see at least col. 18, lines 15-67).

Art Unit: 3684

30. Regarding claim 51, Dellinger teaches wherein the guaranteed minimum periodic retirement income payment amount is determined by the amount and timing of the premium payments made by the user during the accumulation period (see at least col. 18, line 15-67, col. 4, line 30 – col. 6, line 12).

31. Regarding claim 52, Dellinger teaches wherein the adjustment account balance is forgiven as a death benefit during the annuitization period or at the expiration of the certain period, whichever occurs later (see at least abstract, col. 10, line 56 – col. 11, line 3, col. 11 lines 40 –49, col. 12, lines 10 –35, col. 14, lines 3 – 21).

32. Regarding claim 53, Dellinger teaches wherein an administrator retains a secured interest in future periodic retirement income payment amounts, if the adjustment account reflects a balance (see at least col. 4, line 55 – col. 5, line 16, col. 12, lines 43 –60, col. 14, lines 3-10, and lines 43 – 61).

33. Regarding claim 54, Dellinger teaches wherein the administrator is a financial services carrier (see at least abstract, claim 25).

34. Regarding claim 55, Dellinger teaches a method for providing a user with a plurality of guaranteed minimum retirement income payments, comprising: receiving an income generating payment at an equity module (see at least abstract, col. 4, lines 30-46, Fig 5) Dellinger teaches outputting a periodic retirement income payment amount,

Art Unit: 3684

using the equity module, wherein the periodic retirement income payment amount is greater than, equal to, or less than a guaranteed minimum periodic retirement income payment amount if the income generating payments received are received according to a predetermined payment schedule, and wherein the guaranteed minimum periodic retirement income payment amount is defined by the user (see at least col. 4, line 30-46, Fig. 5, col. 8, lines 35-50, col. 8, line 66 – col. 9, line 5, col. 18, lines 15-67).

Dellinger teaches comparing the periodic retirement income payment amount and the guaranteed minimum periodic retirement income payment amount using an adjustment module (see at least col. 15, lines 35-63, col. 16, lines 37 – 57, col. 4, line 55 – col. 6, line 12). Dellinger teaches outputting, using the adjustment module, to the user at least the guaranteed minimum periodic retirement income payment amount, the adjustment module storing a balance in an adjustment account if the periodic retirement income payment amount is less than the guaranteed minimum periodic retirement income payment amount (see at least col. 4, line 30-46, Fig. 5, col. 8, lines 35-50, col. 8, line 66 – col. 9, line 5, col. 18, lines 15-67, col. 5, lines 16-36, col. 11, lines 49 – 57). Dellinger does not specifically teach wherein the equity module determines that that payment amount. However, Arena teaches using the equity module, wherein the periodic retirement income payment amount is determined to be greater than, equal to or less than a guaranteed minimum periodic retirement income payment amount, such determination performed based on whether the income generating payments received are received according to a predetermined payment schedule (see at least ¶ 47). This known technique is applicable to the system of Dellinger as they both share

Art Unit: 3684

characteristics and capabilities, namely they are both directed toward benefit payments based on an initial investment. One of ordinary skill in the art would have recognized that applying the known technique of Arena would have yielded a predictable result and resulted in an improved system. It would have been recognized that applying the technique of Arena to the teachings of Dellinger would have yielded predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such benefit payment determinations into similar systems. Further, determining the payment value by the equity module would have been recognized by those of ordinary skill in the art as resulting in an improved system that would have allowed a guaranteed minimum payment as determined by the module.

35. Regarding claim 56, Dellinger teaches forgiving the adjustment account balance as a death benefit during the annuitization period or at the expiration of the certain period, whichever occurs later (see at least abstract, col. 10, line 56 – col. 11, line 3, col. 11 lines 40 –49, col. 12, lines 10 –35, col. 14, lines 3 – 21).

36. Regarding claim 57, Dellinger teaches wherein the equity module comprises and equity indexed annuities or an equity indexed immediate annuities (see at least col. 10, lines 3-15, col. 13, line 50 – col. 14, line 2).

37. Regarding claim 58, Dellinger teaches a system for providing a user with a plurality of guaranteed minimum retirement income payments (see at least abstract, col.

Art Unit: 3684

4, lines 30-46, Fig 5). Dellinger teaches an equity module to receive an income generating payment and to output a periodic retirement income payment amount wherein the periodic retirement income payment amount is greater than, equal to, or less than a guaranteed minimum periodic retirement income payment amount if the income generating payments received are received according to a predetermined payment schedule (see at least col. 4, line 30-46, Fig. 5, col. 8, lines 35-50, col. 8, line 66 – col. 9, line 5). Dellinger teaches comparing the periodic retirement income payment amount and the guaranteed minimum periodic retirement income payment amount, determining if the periodic retirement income payment amount is greater than, equal to, or less than a guaranteed minimum periodic retirement income payment amount, and outputting to the user at least the guaranteed minimum periodic retirement income payment amount, with the adjustment module storing a balance in an adjustment account when the periodic retirement income payment amount is less than the guaranteed minimum periodic retirement income payment amount (see at least col. 8, lines 35-50, col. 8, line 66 – col. 9, line 5). Dellinger does not specifically teach wherein the equity module determines that that payment amount. However, Arena teaches wherein a periodic retirement income payment amount is determined, by the equity module, to be greater than, equal to, or less than a guaranteed minimum periodic retirement income payment amount, such determination performed based on whether the income generating payments received are received according to a payment schedule (see at least ¶ 47). This known technique is applicable to the system of Dellinger as they both share characteristics and capabilities, namely they are both

Art Unit: 3684

directed toward benefit payments based on an initial investment. One of ordinary skill in the art would have recognized that applying the known technique of Arena would have yielded a predictable result and resulted in an improved system. It would have been recognized that applying the technique of Arena to the teachings of Dellinger would have yielded predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such benefit payment determinations into similar systems. Further, determining the payment value by the equity module would have been recognized by those of ordinary skill in the art as resulting in an improved system that would have allowed a guaranteed minimum payment as determined by the module.

38. Regarding claim 59, Dellinger teaches a method for providing a user with a plurality of guaranteed minimum retirement income payments, comprising: receiving an income generating payment at an equity module (see at least abstract, col. 4, lines 30-46, Fig 5) Dellinger teaches outputting a periodic retirement income payment amount, using the equity module, wherein the periodic retirement income payment amount is greater than, equal to, or less than a guaranteed minimum periodic retirement income payment amount if the income generating payments received are received according to a predetermined payment schedule, and wherein the guaranteed minimum periodic retirement income payment amount is defined by the user (see at least col. 4, line 30-46, Fig. 5, col. 8, lines 35-50, col. 8, line 66 – col. 9, line 5, col. 18, lines 15-67).

Dellinger teaches comparing the periodic retirement income payment amount and the



Art Unit: 3684

guaranteed minimum periodic retirement income payment amount using an adjustment module (see at least col. 15, lines 35-63, col. 16, lines 37 – 57, col. 4, line 55 – col. 6, line 12). Dellinger teaches determining if the periodic retirement income payment amount is greater than, equal to, or less than a guaranteed minimum periodic retirement income payment amount outputting, using the adjustment module, to the user at least the guaranteed minimum periodic retirement income payment amount, the adjustment module storing a balance in an adjustment account when the periodic retirement income payment amount is less than the guaranteed minimum periodic retirement income payment amount (see at least col. 4, line 30-46, Fig. 5, col. 8, lines 35-50, col. 8, line 66 – col. 9, line 5, col. 18, lines 15-67, col. 5, lines 16-36, col. 11, lines 49 –57). Dellinger does not specifically teach wherein the equity module determines that that payment amount. However, Arena teaches using the equity module, wherein the periodic retirement income payment amount is determined to be greater than, equal to or less than a guaranteed minimum periodic retirement income payment amount, such determination performed based on whether the income generating payments received are received according to a predetermined payment schedule (see at least ¶ 47). This known technique is applicable to the system of Dellinger as they both share characteristics and capabilities, namely they are both directed toward benefit payments based on an initial investment. One of ordinary skill in the art would have recognized that applying the known technique of Arena would have yielded a predictable result and resulted in an improved system. It would have been recognized that applying the technique of Arena to the teachings of Dellinger would have yielded predictable results

Art Unit: 3684

because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such benefit payment determinations into similar systems. Further, determining the payment value by the equity module would have been recognized by those of ordinary skill in the art as resulting in an improved system that would have allowed a guaranteed minimum payment as determined by the module.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMIE H. SWARTZ whose telephone number is (571)272-7363. The examiner can normally be reached on 8:00am-4:30pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571)272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3684

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. H. S./  
Examiner, Art Unit 3684

/Kambiz Abdi/  
Supervisory Patent Examiner,  
Art Unit 3684